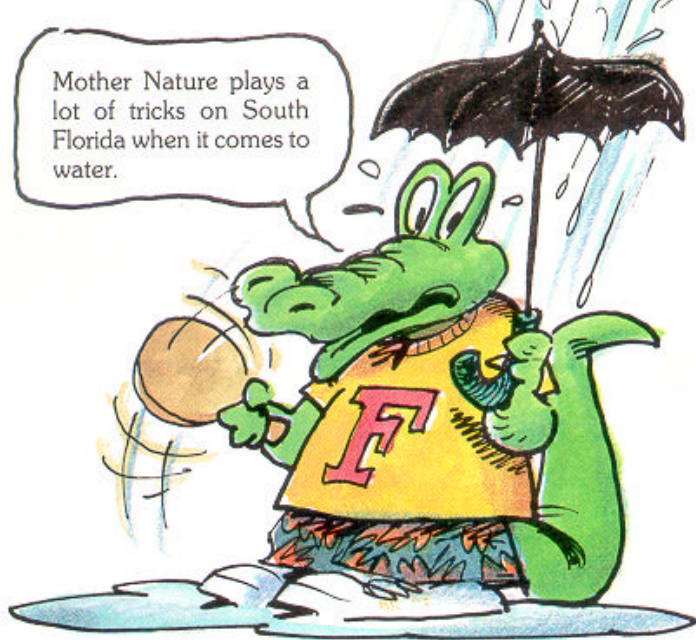


Water Supply Problems

Mother Nature plays a lot of tricks on South Florida when it comes to water.



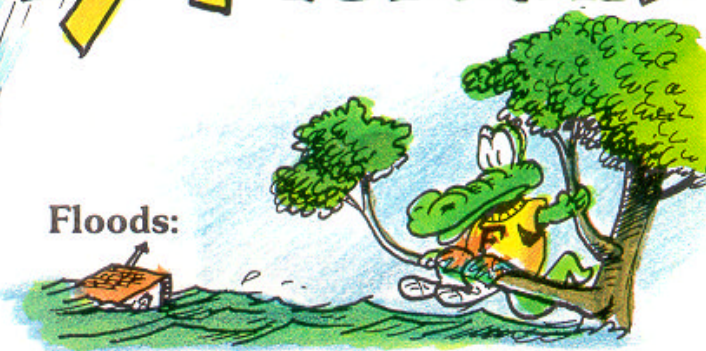
We get an average of 55 to 60 inches of rain a year. The rain, coupled with our warm temperatures, is the kind of weather we call subtropical (wet and warm).

If you could save all the rain we get, you could cover the entire area with almost five feet of water in a year. Lucky for us, water sinks into the ground and runs off into streams, canals, lakes and bays. So we aren't flooded out by all that rain — most of the time.

But our weather seems to have an all-or-nothing attitude. Sometimes it seems to pour down day after day, at other times — for weeks — it's as dry as a soda bottle after a slumber party. They call this seasonal variability — wet summers that bring about two-thirds of our rain, and dry winters when everybody wants the water from the rain we're not getting.

Because of these weather extremes, we also wind up with floods when we get too much rain at once, and droughts when we don't get enough. First, let's talk about too much.

Floods:



To get the amount of rain we do, we have to put up with some pretty big storms. We get so much rain that we have some pretty bad floods. In fact, parts of South Florida were flooded as recently as 1982 and 1988. Homes and businesses were flooded with as much as a foot of water or more. In a few days we can get as much rain as we would expect over two or three months.

Way back before people were here, flooding was an important part of the natural life cycle in the area. When there were floods, nutrients were carried to places where living things needed them.

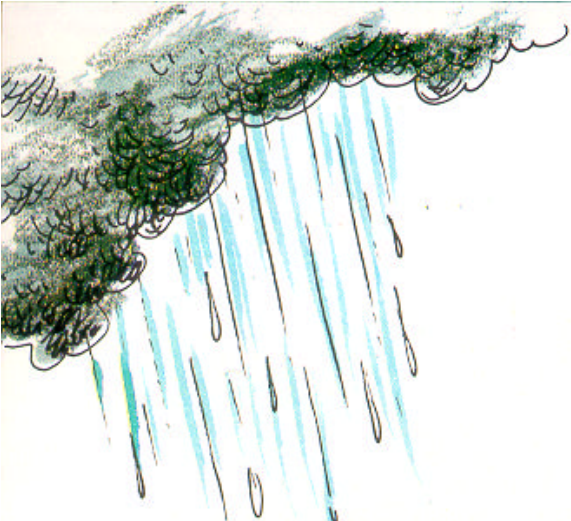
But people do much better without floods. And, we've changed things so much with draining wetlands, with new buildings and with paved areas, that the whole picture is different. Today floods do a lot more harm from pollution and damage than they used to.

The South Florida Water Management District has done a lot of work to control floods, like building canals and putting in other controls to keep flooding down to a minimum. Still, with super-heavy rains, flooding remains a threat.

Droughts:



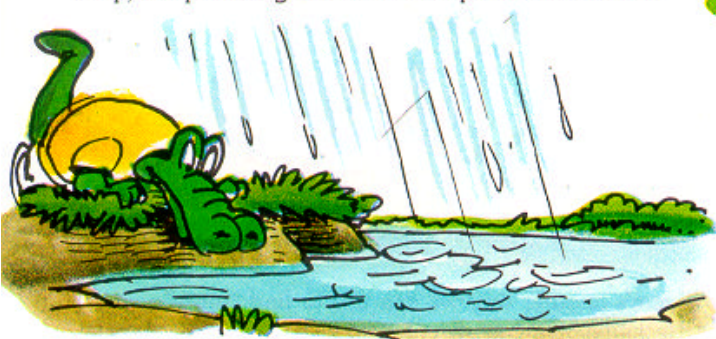
The other extreme of our weather is droughts. These are long periods of time when we don't get any rain. During times of drought our water can be in very short supply. In fact we've had water shortages as recently as 1981, 1985, 1989 and 1990. It's interesting that sometimes we have wet and dry years back-to-back — like in 1981-82. It just shows you how changeable Florida's weather is.



Surface Water Development

It might be possible to use more of the surface water that we get from rain. But to do this we have to keep it from getting polluted and figure out how to store it in the rainy season so we'll have it during the dry part of the year.

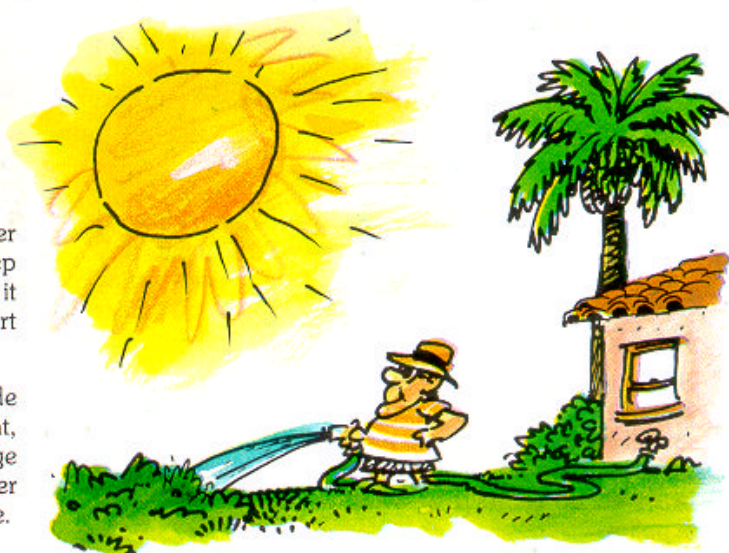
Usually, surface water is stored in lakes or man-made reservoirs. In reality, because South Florida is so flat, there aren't many good places to build water storage areas. There is, however, a new way of storing water deep, deep underground in the aquifer for later use.



And, engineers keep looking, trying to find ways to collect more surface water that will help us meet the growing demands for water.

Conservation

The one thing that everybody can do to help us get the most out of our supplies is to conserve water. In case I haven't mentioned it, conservation means preventing loss from waste — you know, wise use. Conservation doesn't provide us with more water — it just means we can use less water to do the same jobs.



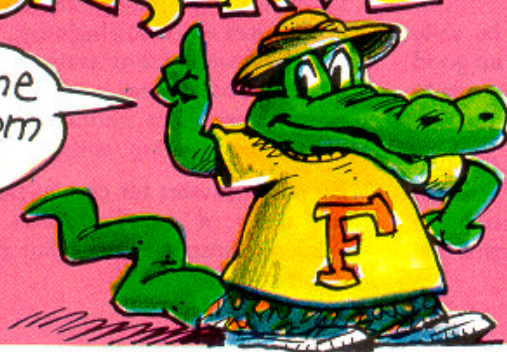
So, when we conserve water, we save it for an unrainy day. When we use less, we leave more, which means we'll have more available the next time there's a water shortage.

Water conservation is kind of like saving money — if you don't spend it now, you'll have it when you need it, like for an emergency.

On the following pages we're going to have some fun talking about conservation and how you can save. But, remember, water conservation is no joke. In fact, it's the best way I know for people to help each other and the environment, which means plants, and wildlife like you-know-who (ME!), and humans, too!

CONSERVE WATER

Here's the
BIG bottom
line...



.. Save it
for an
unrainy day!